AUTOMOTIVE INDUSTRY STANDARD

Procedure for Type Approval, Certification of Agricultural Tractors For Compliance to Central Motor Vehicles Rules

(Revision 1)

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ON BEHALF OF AUTOMOTIVE INDUSTRY STANDARDS COMMITTEE

UNDER CENTRAL MOTOR VEHICLE RULES –TECHNICAL STANDING COMMITTEE

SET-UP BY
MINISTRY OF ROAD TRANSPORT & HIGHWAYS
(DEPARTMENT OF ROAD TRANSPORT & HIGHWAYS)
GOVERNMENT OF INDIA

January 2013

Status chart of the Standard to be used by the purchaser for updating the record

Sr. No.	Corr- igenda	Amend- ment	Revision	Date	Remark	Misc.
Gene	General Remarks:					

Introduction

The Government of India felt the need for a permanent agency to expedite the publication of standards and development of test facilities in parallel when the work on the preparation of the standards is going on, as the development of improved safety critical parts can be undertaken only after the publication of the standard and commissioning of test facilities. To this end, the Ministry of Surface Transport (MOST) has constituted a permanent Automotive Industry Standard Committee (AISC) vide order No.RT-11028/11/97-MVL September 15, 1997. The standards prepared by AISC will be approved by the permanent CMVR Technical Standing Committee (CTSC). After approval, the Automotive Research Association of India, (ARAI), Pune, being the secretariat of the AIS Committee, has published this standard. For better dissemination of this information ARAI may publish this standard on their Web

In the joint meeting of the Agricultural Tractor Manufacturers and Test Agencies held at CFMTTI Budni and ARAI it was agreed that there is a necessity for a detailed testing procedure for certification of compliance to CMVR to be prepared, which will cover the following:

- Tests to be carried
- Changes to agricultural tractor model (Criterion for Extension of Approval)
- Extension certificates
- Standard formats for certificates
- List of agencies whose test reports would be accepted for various parts for which standards are notified etc.

This standard also serves the purpose of all the information related to CMVR certification in standard and will serve as guide for the Agricultural Tractor Manufacturer to get the details of references to all applicable regulations and standards at one place in respect of the procedure applicable for Type Approval, Certification of Agricultural Tractors for compliance to Central Motor Vehicles Rules, 1989.

A draft prepared by the a panel, constituted by ARAI, was submitted to the AISC and had discussed the issues in several meetings

In the 38th meeting of CMVR TSC held on 9th July 2012 it was decided to implement this standard with effect from date of notification.

AISC has already finalized the technical specification formats indicating the technical details of the vehicle/ agricultural tractor to be type approved in the form of AIS-007 and has already been implemented.

In case of models, which have been product approved before this procedure comes into effect, where the consolidated certificates of compliance may not have been issued or the Technical Specifications may not have been in the format prescribed in this procedure, the certificates already issued would continue to be valid till a fresh consolidated certificate is issued due to requirement of any fresh CMVR compliance; provided there is no change in the technical specifications.

This standard addresses the requirements as applicable for Agricultural Tractors only.

Formulation of appropriate rules and procedures for all the above are under various stages of preparation by the committees appointed by MoST. These will be incorporated into this standard, as and when they are finalized.

This standard consolidates the procedures to be followed for the Product Approval of a Agricultural Tractor for compliance to Central Motor Vehicles Rules (CMVR).

Any subsequent amendments to the CMVR may need consequential amendments to this standard. Till such amendments are issued, the Test Agencies shall follow appropriate applicable methods for establishing compliance and certification.

The AISC panel and the Automotive Industry Standard Committee (AISC) responsible for preparation of this standard is given in Annex D and Annex E respectively.

Preparation of a standard covering the details of Conformity of Production for Agricultural Tractors is under consideration by AISC.

Procedure for Product Approval and Certification of Agricultural Tractors for Compliance to Central Motor Vehicles Rules

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Procedure for Product Approval and Certification of Agricultural Tractors for Compliance to Central Motor Vehicles Rules

0	Following are the abbreviations used in this standard:	
AIS	Automotive Industry Standard	
AISC	Automotive Industry Standards Committee	
ARAI	Automotive Research Association of India	
BIS	Bureau of Indian Standards	
BSI	British Standards Institute	
CFMTTI	Central farm Machinery Training and Testing Institute	
CEA	Criterion for Extension of Approval	
COP	Conformity of Production	
CMVR	Central Motor Vehicles Rules	
CTSC	CMVR Technical Standing Committee	
DOAC	Department of Agriculture and Cooperation	
DIN	Deutsche Institute fur Normung	
ECE	Economic Commission for Europe	
EEC	European Economic Community	
ISO	International Organization for Standardization	
MPS	Minimum Performance Standard	
MOA	Ministry of Agriculture	
MOST	Ministry of Surface Transport	
OECD	Organization for Economic Co-operation and Development	
PA	Product Approval	
SS	Safety Standard	
TA	Type Approval	
TMA	Tractor Manufacturers Association	

1.0 SCOPE

1.1 This standard specifies the procedure to be followed for Type Approval for evaluating the Agricultural Tractor model and its variant(s) for product approval and issue of a Certificate of Compliance as notified by Rule No. 126 of the CMVR and criteria for extension of approval to CMVR rules as notified from time to time.

2.0 **DEFINITIONS**

- 2.1 **Agricultural Tractor:** as per AIS-053
- 2.1.1 **Model:** means Agricultural Tractors of one family with essentially same aspects of construction and design, which is of the same category, and has the same number of axles. The Agricultural Tractor Manufacturer designates a model. A model may include variant(s).
- Variants: The variant model(s) may be arrived from a Base Model by the addition/deletion/supplementation of any one or more of the affecting features as per IS 12207 as amended from time to time.
- 2.3 **Type Approval (T/A):** is the establishment of initial compliance of model/variant(s) for evaluating proto/ initial production of model(s) and its variant(s) to the provisions of CMVR.
- 2.4 **Provisions:** mean the requirements related to the construction of motor vehicles notified in the CMVR (to ensure road-worthiness of vehicle), either directly or through a reference to Notified Standards.
- 2.5 **Notified Standard**: means a standard, referred to in CMVR or notified separately under the provisions of CMVR, which specifies details of requirements to be complied with. This may be in the form of
 - An Indian Standard issued by BIS
 - A standard prepared by the AISC Any other Standard notified by MOST

2.6 Criterion for Extension of Type Approval (CEA), is the guidelines to be followed:

- a) For considering whether a change in the Technical Specifications affects the Compliance or not, and
- b) If the change affects the compliance, to decide the tests to be carried out for establishing compliance.

Criterion for Extension of Approval is also to be used for:

- a) Selection of the base model(s) for establishing compliance from a number of models/variants at the time of Type Approval
- b) Deciding on the extension of Type Approval when changes are made in the Technical Specification.
- c) Deciding on approval for new variants.
- d) Procedure to be followed by manufacturer in case of addition of optional features & technology up gradation with in base model / Variant which do not affect the vehicle performance as established during the initial compliance of base model for issue of CMVR certificate like aesthetical changes /decals etc.

- 2.7 **Testing Agency:** is an organization specified in Rule 126 of CMVR for certification of compliance to the provisions.
- 2.8 **Base Model:** is the model/variant(s) whose performance results can be used to represent a range of model/variant(s) considering the CEA (Annex C) and as per IS 12207 as amended from time to time.

Note: To represent an entire range of model/variant(s), declared by the manufacturer, for all the provisions of CMVR, tests on more than one sample may be necessary, considering the CEA.

3.0 APPLICATION FOR TYPE APPROVAL OF AGRICULTURAL TRACTORS

While applying for the Type Approval for ensuring the CMVR compliance, the application shall be accompanied by the following standards, as applicable to the provisions for which such compliance is sought:

- a) List of provisions for which compliance is sought to be established.
- b) All the relevant information specified in standard AIS-007 (Revision 4) "Information on Technical Specifications to be submitted by Manufacturer".
- c) Copies of certificates or test reports of compliance to various provisions, which may have already been obtained from other recognized (see 4.3.1) Testing Agencies.
- d) Copies of previous certificates or test reports for other models/variants, if any, which can be used for establishing compliance of the model to be type approved, with a note explaining the details.

Publications available (Owner's Manual and service/workshop manual)

Note: In case these publications are not available at the time of submitting the prototype model, they shall be submitted by the manufacturer as and when they are ready but not later than beginning of commercial production. In case these publications are not available at the time of prototype testing, the relevant information required by the Testing Agency, shall be provided by the manufacturer. The manufacturer shall declare the date of start of commercial production to the Testing Agency.

4.0 METHODS OF ESTABLISHING COMPLIANCE

4.1 Depending upon the provision, the compliance can be established by either comparison of the values declared in the Technical Specifications with those in the provisions of CMVR, or checking the fitment of part(s) on the Agricultural Tractor or by testing, as applicable.

Applicability of rules, method of establishing the compliance and details of the test procedures are given in Annex A.

Note: The applicability of rules given in Annex A is only given as a ready reckoner. Method of establishing compliance to provisions and details of test procedure are given for provisions covered by the notification as indicated in introduction.

Explanatory Notes:

- (1) Comparison of values declared in the Technical Specifications with those in the provisions of CMVR, is applicable to rules such as dimensions, weights etc.
- (2) Checking the fitment of part(s) on the Agricultural tractor is applicable to rules calling for fitment of components/systems such as lamps, horns, rear view mirrors etc.

The compliance of such items to any provisions shall be established independently as called for in the respective provision.

4.2 In case the compliance is established by testing:

4.2.1 The tests may be carried out either at the premises of the Testing Agencies or at the manufacturer's premises /outlets at the discretion of the Testing Agency. When the tests are carried out at the manufacturers' premises, the manufacturer shall demonstrate the adequacy of the test facilities for carrying out the tests as per the provisions.

The Testing Agency may also, at the request of the manufacturer, certify, in advance, the adequacy of the test facilities at his premises, in such cases verification of routine calibration of the equipment etc. will be needed at the time of testing.

4.2.2 During the testing, if any of the requirements are not met, the manufacturer may request for a retest after carrying out necessary rectifications. If the rectification involves changes in the Technical Specifications, as declared by the manufacturer (Para 3.0.b) tests shall be repeated for all those characteristics where the changes are not within the limits of Criteria for Extension of Approval.

If the rectification does not involve a change in the Technical Specifications, the tests already completed satisfactorily, need not be repeated.

4.2.3 In case the compliance is established by verification of documentation:

The compliance to individual provisions can also be established by verifying the documents submitted by the manufacturer such as certificates or test reports of the components only.

- a) Issued by other recognized agencies listed in para 4.3.1
- b) Issued by recognized agencies listed in para 4.3.1 for another model/variant, the Technical Specifications of which are comparable to those of the model sought to be type approved, and the changes are within the limits prescribed in the Criteria for Extension of Approval.

- 4.3.1 The latest Certificates or test reports of the components only, issued by the following agencies would be considered valid for compliance to the relevant rules / provisions of CMVR:
 - a) Any Testing Agency notified under CMVR
 - b) Any Testing Agency or laboratory duly authorized by BIS for carrying out certification work for the standards issued by BIS. (The CMVR Technical Standing Committee may issue instructions regarding disqualifying the test reports from any such agency.)
 - b) Any other Testing Agency approved by the CMVR Technical Standing Committee.
 - d) Authorized certifying agency or accredited certifying agency of the country of origin of the international/foreign national standards notified as alternate standards by Government of India.

5.0 USE OF OTHER STANDARDS

Test reports or certificates of compliance to standards, issued by agencies listed in para 4.3.1, other than the notified standards, shall be considered as proof of compliance to the notified standards, in the following cases:

- a) The alternate standard has been approved by the Government of India.
- b) The standard is a conversion of a notified standard to an Indian Standard, but is pending for notification, approved by AISC/CTSC.
- c) The alternate standard is a revision of the notified standard, but is pending for notification, approved by AISC/CTSC.

Explanatory Note:

Such standards may comprise an international standard (e.g. those issued by EEC, ECE, ISO, IEC etc.), a foreign national standard (such as those issued by DIN, JIS, BSI etc.) or an Indian standard prepared as a conversion of AIS or a revision of an already notified Indian Standard

6.0 CERTIFICATE OF COMPLIANCE

After compliance is established for all the provisions, applicable to that model /variant(s), a Certificate of Compliance consolidating all applicable provisions, subject to para 7.2.3, shall be issued by the Testing Agency.

The Brief Technical Specifications as declared by the manufacturer (As per Tables of AIS-007) shall be counter signed by the Testing Agency and shall be attached to the certificate of compliance.

Note: The expression "Consolidated certificate" used in this standard refers to such a certificate of compliance, referred above. Format of certificate is given in Annex-B.

- In order to ensure that all the related verification activities are completed, the Testing Agency may use an appropriate check list.
- 6.3 The Testing Agency shall issue two sets of the Certificate of Compliance, in original, to the Agricultural Tractor Manufacturer.
- The Testing Agency shall also issue reports of all tests conducted by that agency to the manufacturer on request. For the purpose of records, the brief specification submitted by the manufacturer (As per Tables of AIS-007, as applicable) shall also be counter signed by the Testing Agency and given to the manufacturer. The test report shall indicate the identification number, of the relevant technical specifications submitted by the manufacturer as per AIS-007. (Table 16, 17 & 18)
- 6.5 The Testing Agency shall maintain confidentiality of the certificates, test reports and test data. However, if required, these may be given to the Ministry of Agriculture and Ministry of Surface Transport. The compiled test data without indicating the name of the manufacturer or model may be given to appropriate inter-ministerial Working Groups or Committees dealing with the subject as and when needed, and on request, to TMA.
- In the case of applications for compliance to individual provision(s), the test report(s) issued by the Testing Agency (4.3.1) shall be considered as proof of compliance for issuing the Consolidated Certificate.

In such cases, the test report shall indicate:

- Whether compliance has been established or not
- The provision(s) for which compliance is established
- The list of variant(s), if any, for which compliance is established

6.7 **Refusal of Type Approval**

In case, a Testing Agency has refused approval of a Agricultural Tractor this should be informed to the manufacturer and other Testing Agencies. If the changes are in parameters related to the provisions, the Testing Agency, which has issued the certificate of compliance, may then consider, whether,

- a) The model with the changed specifications still complies with provisions; or,
- b) Any further verification is required to establish compliance.

7.0 EXTENSIONS OF TYPE APPROVAL

Type Approval already granted shall need revalidation, by an extension of the Type Approval whenever the Technical Specifications, already attested by Testing Agency are amended by the manufacturer or whenever there are changes in the provisions.

7.1 Changes in the Technical Specifications of the model/variant(s) already Product Approved:

- 7.1.1 Every modification pertaining to the information, even if the changes are not technical in nature (such as change of model name/commercial name and manufacturers name etc.) declared in accordance with Para 3.0 shall be intimated by the manufacturer to the certifying agency for obtaining type approval.
- 7.1.2 For considering whether testing is required or not, guidelines given in Annex C (Criteria for Extension of Approval) and IS 12207 as amended from time to time shall be used.

Note: The changes in the details given as per Tables of standard AIS-007.

- 7.1.3 In case of fulfillment of criterion of para 7.1.1 or after results of further verification as per para of 7.1.2 are successful, the approval of compliance shall be extended for the changes carried out as per Annex A.
- 7.1.4 With reference to the performance parameters related to the notified provisions, in order to facilitate the processing of extension certificate, the manufacturer shall submit declaration based on the requests by the Testing Agency.

7.2. Changes in the Provisions

For every subsequent change/addition in the provisions, the manufacturer shall get the Certificate of Compliance extended from the Testing Agencies. The procedure of establishing compliance shall be as per Para 4.0

7.2.1 In case testing is required for establishing compliance,

- a) Tests need to be carried out only for those parameters, which are required to establish compliance to the new/changed provision. If, for the purpose of complying with the new provisions, changes are made in the Technical Specifications of the model/variant, the additional verifications shall be as per Para 7.1
- b) If requirements of new/changed provisions were already satisfied in the previous Type Approval it is not necessary to carry out further verification/tests provided the Type Approval report or the Certificate is not more than four years old.
- 7.2.2 In cases where the provision relates to fitment of a component and the compliance is to be established by merely checking fitment on the agricultural tractor, (as per para 4.1), it is not necessary for the Testing Agency to verify the fitment if the manufacturer:
 - a) Gives an undertaking that the necessary fitments will be carried out by him from the date of applicability of provision
 - b) Submits the details of the provisions made in the agricultural tractor for fitment of the item.
 - c) Submits test reports for the individual requirements, if any, specified for the components.

d) The Tractor manufacturer possesses a valid certificate of compliance to ISO 9001-1994 or ISO 9002-1994 or equivalent for the plant where the model in question is manufactured.

The manufacturer shall submit all of the documents as specified in (a), (b), (c) and (d) above or otherwise shall submit the tractor along with fulfillment of requirements for certification.

After implementing the necessary fitments in production, the manufacturer shall inform the Testing Agency who had issued the certificate of compliance, the date on which they have been introduced in production, within 4 weeks of date of such provision becoming mandatory.

7.2.3 In case of notified provisions, which are to come into effect at a later date, the manufacturer may get the Product Approval in advance, which could be along with an original Product Approval or an extension

8. 0 ISSUE OF EXTENSION OF TYPE / PRODUCT APPROVAL

The extension of Type Approval may be communicated by the Testing Agency to the manufacturer in the following manner.

- 8.1 For incorporation of compliance to a new/changed provision, or inclusion of variant(s), a fresh consolidated certificate shall be issued.
- 8.2 In case of changes to the Brief Technical Specification, which is an enclosure to the original certificate, also a fresh consolidated certificate shall be issued.
- 8.3 In other cases, compliance of changes in the Technical Specifications shall be communicated by the Testing Agency to the Agricultural Tractor Manufacturer in the format given in Annex B.

9.0 AMENDMENTS/ REVISIONS OF NOTIFIED STANDARDS

9.1 Amendments:

Amendments issued to the notified standard are generally in the nature of editorial corrections and have no significance on certification.

However for the purpose of establishing compliance the amendments issued to the notified standards would become applicable from date of issue of the amendment.

In case, if it is considered by Testing Agency or the manufacturer that such an amendment, due to it not being in the nature of editorial correction has an effect on certification, the matter shall be taken up with AISC.

9.2 Revisions:

The revisions of notified standards shall become applicable only from the date notified in the CMVR or its related notifications. In such cases, procedure given in Para 7.2 shall apply.

10.0 RESOLVING OF OPERATIONAL DIFFICULTIES

In case of difficulties arising out of an interpretation of the provisions and other operational difficulties, the Testing Agency and the manufacturer shall endeavor to resolve these by mutual discussions, within the frame work of CMVR and related procedures. However, if these cannot be resolved mutually, the matter shall be referred by the Agricultural Tractor Manufacturer under intimation to the Testing Agency, to the CMVR Technical Standing Committee for a final decision and implementation.

11.0 TEST FACILITIES

If the test facilities for any of the provisions/notified standards are not available at any of the Testing Agencies, (as defined in para 4.3.1), TMA will bring it to the notice of AISC and request for a postponement of the implementation of such provisions/notified standards, taking into account the time for development, testing and certification after the facilities are fully commissioned. In case the postponement is not agreed to, the Testing Agencies may be authorized to implement alternative arrangements for establishing compliance.

ANNEX A

(See Para 4.1)

LIST OF APPLICABLE RULES AND METHOD OF ESTABLISHING COMPLIANCE.

The method to be followed for verification of compliance to various provisions are given below. (Refer to para 4.1)

Rule	Sub-rule	Subject	Method of Verification	Applicability
50	1(iv),(v), (vi) & (5)	Form and Manner of display of registration marks	Check	All Agricultural Tractors
93-A	1 to 4	Overall Dimensions	Test	All Agricultural Tractors
94	1,2,3	Tyres	Check	All Agricultural Tractors
95-A	1,2	Size and Ply Rating of tyres	Check	All Agricultural Tractors
96-C		Brakes	Test as per IS 12061 : 1994 and IS 12207 : 2007	All Agricultural Tractors
98-B	1	Steering Gear Back lash	Check	All Agricultural Tractors
98-B	2	Turning Circle	Test as per IS 11859 : 1986	All Agricultural Tractors
98-B	3	Steering Effort	Test as Per AIS-042	All Agricultural Tractors
99		Forward and backward motion	Check	All Agricultural Tractors
102	1	Signaling devices, direction indicators and stop light	Check	All Agricultural Tractors
102	2	Stop light on actuation of foot operated service brake	Check	All Agricultural Tractors
103	1	Position of indicators	Check	All Agricultural Tractors
103	2	Hazard warning lamp	Check	All Agricultural Tractors
104 B	1	Fitment of Reflector	Check	All Agricultural Tractors
104 B	2	Reflectors	Check	All Agricultural Tractors
105	1, 2	Lamps	Check	All Agricultural Tractors
106	1	Deflection of Lights : fitment & construction	As per IS 12239 (Part 2): 1988	All Agricultural Tractors
108	1	Red light to front and light other than red to rear	Check	All Agricultural Tractors
109		Parking light	Check	All Agricultural Tractors

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111		Prohibition of Spot lights	Check	All Agricultural Tractors
112		Exhaust gas	Check	All Agricultural Tractors
113		Location of Exhaust Pipe	Check	All Agricultural Tractors
115 A	1,2,3	Emission of Smoke and Vapour	Test as per IS 12062 : 1987	All Agricultural Tractors
115 A	4 & 7	Emission of Smoke and Vapour	Test as per ISO 8178-4 "C1" 8 Mode Cycle or TAP-115/116 Document	All Agricultural Tractors
117	1	Speedometer	Check	All Agricultural Tractors
119	1 & 2	Horn	Check	All Agricultural Tractors
120	1 & 3	Noise standards	Test as per IS 12180 : 2000	All Agricultural Tractors
122	1A & 2	Embossment of: -Engine NoChassis NoMonth and year of manufacture:	Check	All Agricultural Tractors
124-A	1	Bulbs of lamps	As per IS 1606 : 1979	All Agricultural Tractors
124-A	2	Light and light signaling devices, rear warning triangle	As per AIS-030, AIS-062, AIS-088	All Agricultural Tractors
124-A	3	Hydraulic Brake Hose	As per IS 7079 : 1995	All Agricultural Tractors
124-A	4	Hydraulic fluid	As per IS 8654 : 1984	All Agricultural Tractors
124-A	5	Tow Hook	As per IS 12362 (part 2)	All Agricultural Tractors
124-A	6	Fuel Tank	As per IS 12056 : 1987	All Agricultural Tractors
124-A	7	Wheel Nuts and hub caps	As per IS 13941 : 1994	All Agricultural Tractors
125	2	Rear view mirror	Check	All Agricultural Tractors

ANNEX B

(See Para 6)

FORMATS FOR CERTIFICATE OF COMPLIANCE

- B1. The format of the Certificate of compliance consolidating all applicable provisions is given in Table B1.
- B2. The format of the Annex A, listing the applicable rules is given in Table B2 for complete agricultural tractors.
- B3. The format for extension approval of changes in specification is given in Table B 3, and the Annex 1 listing the details of changes etc is given in Table B4.
- B4. These formats are intended to cover a majority of cases. If necessary, depending on the requirements of individual cases, the Testing Agency may include additional information or modify the format, as required.

TABLE B1 Format for Certificate of Compliance to the Central Motor Vehicle Rules

No. CMVR/T-.../2011-2012

Dated the --/--/2011

(CERTIFICATE FOR AGRICULTURAL WHEELED TRACTOR FOR COMPLIANCE TO THE CENTRAL MOTOR VEHICLES RULES, 1989 (AS APPLICABLE ON DATE)						
1.	Based on the verification of standards and tests conducted on the Prototype / Commercial base model						
	the applicant; it is certified thatcomplies with the provisions of Central Motor						
	Vehicles Rules, 1989, as amended up-to-date and as detailed in the <u>Annex-A</u> . (No. of page(s): 1).						
2.	The details of coding system along with location of chassis No., engine No. and coding for the month and year of production of the tractor, as Submitted by the manufacturer, is enclosed as Annex-B. (No. of page(s) :1).						
3.	The brief technical specification of the said tractor, as submitted by the manufacturer, is enclosed as <u>Annex-C</u> . (No. of page(s): 7).						
4.	The drawing of Rear Marking Plate, as submitted by, is enclosed as Annex-D (No. of page(s):-1).						
	Note: (i) This certificate is issued in pursuance of Gazette Notification G.S.R. 111 (E) dated 10.02.2004 and Corrigendum G.S.R. 176 (E) dated 05.03.2004, G.S.R. 165 (E) dated 09.03.2005, G.S.R. 206 (E) dated 01.04.2005, G.S.R. 589 (E) dated 16.09.2005 and G.S.R. 784(E) dated 12.11.2008. (ii) This certificate is issued for the purpose of registration only. (iii) (Name of the Testing Agency who issues the certificate) has the right to initiate cancellation / withdrawal of the certificate issued at any time in case of misrepresentation /						

alteration / fraud etc. comes to the knowledge of the Testing Agency.

Authorized Signatory

TABLE B2 Format For Annex - A for Agricultural Tractor

No. CMVR/T/YYYYY-YYYY	Dated the DD/MM/YYYY
The TF	RACTOR fitted
diesel engine has be	en Inspected/Tested and its documents
have been verified for compliance to following	CMV Rules and found to be complying:

Rule No.	Title	Sub Rules

Authorized Signatory

TABLE B3 Format for Extension of Approval

E	Extension of Approval for Compliance to the Central Motor Vehicles Rules.							
Ex	Extension certificate formats							
No	No. CMVR/T-EXT/T/2009-2010 Dated://2009							
E	XTENSION No. 1/2/3 to CERTIFICATE No. CMVR/T Dated							
1.	Whereas M/s(Address of tractor manufacturer) has submitted an Emission Certificate bearing No dated in respect of(Make & model of tractor) fitted with(make & model of engine); issued by ARAI, Pune / iCAT							
2.	And Whereas M/s. (Address of tractor manufacturer) has submitted an undertaking bearing No dated with regard to change in Technical Specification of the said tractor/engine.							
3.	Now therefore, on the basis of the above, the validity of the CMVR Certificate No.							
4.	The list of changes in technical specifications ,as submitted by M/s(Address of tractor manufacturer), is enclosed as Annex (No. of pages)							
5.	This extension should be read in conjunction with earlier Certificate No. CMVR/T Dated							
	Note: (i) This certificate is issued for the purpose of registration only. (ii) This extension certificate is issued on the basis of documents produced / submitted by the manufacturer. (iii) (Name of the Testing Agency who issues the certificate) has the right to initiate cancellation / withdrawal of the certificate issued at any time in case of misrepresentation / alteration / fraud etc. comes to the knowledge of the Testing Agency.							
	Authorized signatory							

(The matters given in this font are examples of the details to be filled up.)

TABLE B4

Format for Annex to Extension of Approval

ANNEX - I **To** Extension - 1 Dated . --/--, to Certificate FOR COMPLIANCE TO THE CENTRAL MOTOR VEHICLES RULES. **Details of change in Technical Specification** Name of Agricultural Tractor Manufacturer: 2 Reference CMVR Certificate number (s) 2.1 2.2 2.3 Specification / Document Number (Referred in base 3 Certificate) 3.1 Specification / Document Number at the time of last approval 3.2 Document / Specification Number (Extension -1). .now approved 4 Nature of change (Give a brief description) 5 Changes in the Specification Sr. Specs. Description Parameter Parameter No.

Testing Agency	Manufacturer	
Signature	Signature	Document No.(indicating also revision status)
Name	Name	Tevision status)
Designation	Designation	
Date	Date	Sheet No of

ANNEX C (See Para 7.1.2)

CRITERION FOR EXTENSION OF PRODUCT APPROVAL (CEA)

PREAMBLE

This Annex gives factors to be considered while selecting a vehicle to represent a range of variants for establishing CMVR compliance of a model for Type Approval.

While establishing the compliance, the inter-relationship between CEA & CMVR shall be adopted as explained in Appendix C1.

This is also applicable to:

- Extension of Type Approval (CMVR compliance) for changes in Technical Specifications of an already Type Approved model.
- Establishing compliance of new features / variant (s) / models based on an already Type Approved model.

GENERAL GUIDELINES

- In general, when changes in Technical Specifications of a model / variant do not affect the performance adversely, and are still within the stipulated limits, the Type Approval (CMVR compliance) can be extended without further verification.
- If the changes affect some of the performance parameters, tests shall be carried out only for those parameters.

The changes in parameters, with respect to an agricultural tractor tested, as declared in the Technical Specifications (AIS-007) that are deemed to affect the performance in respect of various provisions/notified standards and the tests to be performed, if any, for extending the Type Approval are given below.

Changes other than those given against each provision / notified standard considered to be having no adverse effect on the compliance to the provision/notified standard to the satisfaction of the Testing Agency.

Decision on any such parameter shall be informed by that Testing Agency to other Testing Agencies, TMA, and other AISC members giving the logic for such a consideration.

C0.0 GUIDE LINES FOR APPLYING CEA

C0.1 If the manufacturer has indicated a range of models/variant(s) to be certified, at the time of initial type approval, necessary model shall be selected from this range to represent the entire range, considering the CEA of each of the provisions.

It may be necessary to have more than one representative test sample to represent the entire range and all the provisions.

Note: To cover a range of optional features / variant models and to select a representative test sample for CMVR testing, the representative test sample selected for CMVR testing may have different technical configuration than the base model established for commercial testing purpose as per IS 12207.

The details of tests to be carried out on each of these models and the provisions for which each of features / variant(s) /model can be certified, shall also be worked out.

The format for submitting the information necessary for working out the above is provided in AIS-007.

If there is not a range of models / variant(s) to be certified, at the time of initial type approval, the model tested initially shall be treated as the base model.

The interrelation ship between CEA and CMVR are tabulated and enclosed as Appendix C1, to act as a ready reckoner.

- C0.2 When the validity of the certificate is to be extended for changes in the Technical Specifications, the manufacturer shall declare the changes and the base models to be considered and the details to given in the appropriate tables of AIS-007. The Testing Agency shall evaluate changes in the system and tractor related parameters with respect to the test results of the applicable base model based on CEA, and where applicable, decide the new base model(s), and tests to be carried out on them which are required to establish compliance.
- C0.3 If tests are carried out, they shall be also treated as those of a base Model, for future evaluations.
- C0.4 Any changes related to statutory/regulatory requirements shall be acceptable in the base model and variants. Extension approval for these requirements shall be done on the basis of submission of required compliance certificates of components / Assemblies & completion of required inspection/tests on base model and variants, if applicable. The statutory/regulatory requirements of the base model and variants shall be regulated as per Table 4 clause 8.8 of IS 12207 as amended from time to time.
- C0.5 If any addition of features which are optional shall as per clause 8.1.2 of IS 12207 as amended from time to time, the extension certificate may be issued subject to the inspection / test (if applicable) without change in the model name of tractor.

APPENDIX C1 INTER-RELATIONSHIP BETWEEN CEA AND CMVR

(See para C 0.1)

Rules → Parameters changed, others remaining same	Overall Dimensions CMVR 93-A	Tyres CMVR 95-A; IS 13154: 1991	Brakes CMVR 96-C; IS 12061: 1994 and IS 12207: 2011	Turning Circle CMVR 98-B (2); IS 11859 : 1986 ;	Steering Effort CMVR 98-B(3); AIS-042	Light & Signaling devices CMVR 102(1), 124-A, Installation AIS-030	Location of Exhaust Gases discharge & Pipe CMVR 112,	Emission of Smoke and Vapour CMVR 115-A(2)(3)(7), Visible pollutant IS 12062: 1987	Noise CMVR 120(1)(3); IS 12180: 2000, IS 12207: 2011
Agricultural Tractor	n	n	N	N	n	n	n	n	n
2. Tractor Weight (As per Haulage Ballast)	Y	P	Y	N	Y	n	n	n	P
3. Cooling System	n	n	N	N	n	n	n	Y	n
4. Exhaust System	P	n	N	N	n	n	Y	Y	Y
5. Engine Power	n	n	N	N	n	n	n	Y	Y
6. Tyre size	P	Y	Y	P	Y	n	n	n	Y
7. Maximum Forward Speed	n	n	Y	N	n	n	n	n	Y
8. Length, Width, Height	Y	n	N	N	n	n	P	n	n
9. Wheel Base	Y	n	P	Y	P	n	n	n	n
10.Standard Track Width (F / R)	n	n	P	Y	P	P	n	n	n
11. Bonnet Design	n	n	N	N	n	Y	P	n	n
12. Rear Mudguards	n	P	N	N	n	Y	n	n	n
13. Brake System	n	P	Y	N	n	n	n	n	n
14. Steering System	n	n	N	Y	Y	n	n	n	n
15. 2 WD / 4 WD	n	Y	Y	Y	Y	n	n	n	Y
16. ROPS	Y	n	N	N	n	n	n	n	n

Y: May affect, CEA to be studied in detail

Note: The changes in the above parameters shall be within the provisions as laid down in the IS 12207 as amended from time to time.

P: May not affect directly. But consequential changes may affect only under limited circumstances.

n: No Effect on CEA

ANNEX D

COMPOSITION OF AISC PANEL ON PROCEDURE FOR PRODUCT APPROVAL AND CERTIFICATION OF AGRICULTURAL TRACTORS FOR COMPLIANCE TO CENTRAL MOTOR VEHICLES RULES*

Convener	
Mr. T. M. Balaraman	Hero MotoCorp Ltd., (SIAM)
Members	Representing
Mr. A.V. Mannikar	The Automotive Research Association of India (ARAI)
Mr. D. P. Saste	Central Institute of Road Transport (CIRT)
Director	International Centre for Automotive Technology (ICAT)
Director	Indian Institute of Petroleum (IIP)
Mr. V.N.Kale	Central Farm Machinery Training and Testing Institute(CFMTTI)
Mr. G.R.M. Rao	Vehicle Research & Dev. Estt. (VRDE)
Dr. N. Karuppaiah	National Automotive Testing and R&D Infrastructure Project (NATRIP)
Mr. K. K. Gandhi	Society of Indian Automobile Manufacturers (SIAM)
Mr. R. M. Kanitkar	Society of Indian Automobile Manufacturers (SIAM) (Force Motors Ltd.)
Mr. Z. A. Mujawar	Society of Indian Automobile Manufacturers (SIAM)(Mahindra and Mahindra Ltd)
Mr. T.C. Gopalan,	Tractor Manufacturers Association (TMA)
Mr. K. Rajeswar	Mahindra & Mahindra Ltd., FES - Tractor Division(TMA)
Mr. S. K. Garg	Escorts R&D Centre(TMA)
Mr. S. Gopal	TAFE Motors and Tractors Ltd(TMA)
Mr. Philip Koshy	John Deere Equipment Pvt. Ltd(TMA)
Mr. Mohit Kumar	New Holland, Fiat India Pvt. Ltd (TMA)
Mr. K. N. D. Nambudiripad	Automotive Component Manufacturers Association (ACMA)

^{*} At the time of approval of this Automotive Industry Standard (AIS)

ANNEX E

COMMITTEE COMPOSITION * Automotive Industry Standards Committee

Chairman	
Shri Shrikant R. Marathe	Director
	The Automotive Research Association of India, Pune
Members	Representing
Representative from	Ministry of Road Transport & Highways (Dept. of Road Transport & Highways), New Delhi
Representative from	Ministry of Heavy Industries & Public Enterprises (Department of Heavy Industry), New Delhi
Shri S. M. Ahuja	Office of the Development Commissioner, MSME, Ministry of Micro, Small & Medium Enterprises, New Delhi
Shri T. V. Singh	Bureau of Indian Standards, New Delhi
Director	Central Institute of Road Transport, Pune
Shri D. P. Saste (Alternate)	
Director	Indian Institute of Petroleum, Dehra Dun
Shri C. P. Ramnarayanan	Vehicles Research & Development Establishment, Ahmednagar
Representatives from	Society of Indian Automobile Manufacturers
Shri T.C. Gopalan	Tractor Manufacturers Association, New Delhi
Shri K.N.D. Nambudiripad	Automotive Components Manufacturers Association of India, New Delhi

Member Secretary
Mrs. Rashmi Urdhwareshe
Sr. Deputy Director
The Automotive Research Association of India, Pune

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